

# Notice of Allowability

Application No.

09/851,018

Examiner

Qamrun Nahar

Applicant(s)

LAM ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the RCE filed on 6/10/05.
2. ☒ The allowed claim(s) is/are 1-17 and 19, renumbered 1-18.
3. ☒ The drawings filed on 22 September 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_



**TUAN DAM**  
**SUPERVISORY PATENT EXAMINER**

### **DETAILED ACTION**

1. This action is in response to the RCE filed on 6/10/05.
2. The rejection under 35 U.S.C. 102(e) as being anticipated by Biggerstaff (U.S. 6,745,384) to claims 1, 3-5, 9, 11-13, 17 and 19 is withdrawn in view of applicant's amendment and remarks/arguments.
3. The rejection under 35 U.S.C. 103(a) as being unpatentable over Biggerstaff (U.S. 6,745,384) to claims 6-8 and 14-16 is withdrawn in view of applicant's amendment and remarks/arguments.
4. The rejection under 35 U.S.C. 103(a) as being unpatentable over Biggerstaff (U.S. 6,745,384) in view of Schreiber (U.S. 6,438,747) to claims 2 and 10 is withdrawn in view of applicant's amendment and remarks/arguments.
5. The rejection under 35 U.S.C. 103(a) as being unpatentable over Biggerstaff (U.S. 6,745,384) in view of Goebel (U.S. 6,009,272) to claim 18 is withdrawn in view of applicant's amendment and remarks/arguments.
6. Claims 1, 9 and 17-19 have been amended.
7. Claim 18 has been canceled, see Examiner's Amendment below.
8. Claims 1-17 and 19 are pending.
9. Claims 1-17 and 19 are allowed, renumbered 1-18.

### **EXAMINER'S AMENDMENT**

10. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

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1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Paul E. Kudirka, Esq. (Reg. No. 26,931) on August 3, 2005.

The application has been amended as follows:

**In the Claims:**

17. (Currently Amended) A computer program product including a computer readable medium, said computer readable medium having a computer program stored thereon, said computer program for processing software source code with a variable looping statement having a loop index, an initial expression, an exit expression and a body, wherein at least one of the initial and exit expressions depends on a variable other than the loop index to enable loop unrolling, said computer program comprising:

program code for determining from the initial expression and the exit expression, a constant upper bound;

program code for determining from the initial expression and the exit expression, a constant lower bound;

program code for determining a condition that must be satisfied, said condition reflecting any conditions within the initial expression and the exit expression; and

program code for replacing the variable looping statement in the software source code with a constant looping statement, wherein said upper bound and said lower bound define a

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range of values for a loop index within said constant looping statement, wherein said constant looping statement includes a nested conditional statement which tests said determined condition, wherein a body of said constant looping statement comprises [[a]] the body of said variable looping statement, and wherein said body of said constant looping statement is only executed in the event that said determined condition is satisfied.

18. (Canceled)

- END -

### **REASONS FOR ALLOWANCE**

11. The following is an examiner's statement of reasons for allowance:

The closest cited prior art, Biggerstaff (U.S. 6,745,384) teaches a method of processing a variable looping statement. However, the cited prior art taken alone or in combination fail to teach, in combination with the other claimed limitations, "replacing the variable looping statement in the software source code with a constant looping statement, wherein said upper bound and said lower bound define a range of values for a loop index within said constant looping statement, wherein said constant looping statement includes a nested conditional statement ..." as substantially recited in each of independent claims 1, 9, 17 and 19; and as pointed out by the applicant's remarks/arguments on pg. 8, par. 3 to pg. 11, par. 2.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### *Conclusion*


12. Any inquiry concerning this communication from the examiner should be directed to Qamrun Nahar whose telephone number is (571) 272-3730. The examiner can normally be reached on Mondays through Fridays from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam, can be reached on (571) 272-3695. The fax phone number for the organization where this application or processing is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Qamrun Nahar  
August 8, 2005



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SUPERVISORY PATENT EXAMINER